I. Amendments To The Claims

1. - 61. (previously canceled)

62. (currently amended) An isolated human IFNAR2 polypeptide **comprising the sequence of SEQ ID NO: 2**, wherein said polypeptide is mutated at amino acid residues histidine 78 and asparagine 100 of the extracellular domain, and wherein said mutations synergistically increase the affinity for IFN-β compared to the wild type polypeptide, and wherein said polypeptide is characterized by the following:

(a) histidine 78 is substituted by alanine; and

(b) asparagine 100 is substituted by alanine.

63.-65. (previously canceled)

66. (currently amended) The polypeptide of claim 62, wherein the polypeptide ~~comprises a sequence selected from the group consisting~~ **consists essentially** of **the sequence of** SEQ ID NO: 2.

67. (previously presented) The polypeptide of claim 62, wherein the affinity to IFN-β is at least 30 pM.

68. (previously presented) The polypeptide of claim 62, wherein the affinity to IFN-β is at least 25 to 100-fold higher than the affinity of the wild type polypeptide.

69. (previously presented) The polypeptide of claim 62, wherein the polypeptide comprises the extracellular domain.

70. (previously presented) The polypeptide of claim 62, wherein the polypeptide is covalently bound to IFN.

71. (previously presented) The polypeptide of claim 70, wherein the IFN is IFN-β.

72. - 74. (previously canceled)

75. (currently amended) The polypeptide according to any one of claims 62 or ~~66-71~~ **67-71** wherein the polypeptide is a fusion protein of IFNAR2.

76. (previously presented) A DNA encoding the polypeptide of claim 62.

77. (previously presented) The DNA of claim 76, wherein the polypeptide comprises a signal peptide sequence.

78. (previously presented) The DNA of claim 77, wherein the signal peptide sequence is that of human growth hormone.

79. (previously presented) A vector comprising the DNA according to any one of claims 76-78, wherein the vector is capable of expressing the polypeptide in a prokaryotic host cell or eukaryotic host cell.

80. (previously presented) A host cell comprising the vector of claim 79.

81. (previously presented) A method of producing an IFNAR2 mutant polypeptide comprising:

(a) cultivating the cell of claim 80 under conditions that cause the expression of the polypeptide; and

(b) isolating the polypeptide.

82. (currently amended) A composition comprising the polypeptide of claim 62 ~~and optionally an IFN antagonist~~.

83. (canceled).

84. (previously canceled)

85. (canceled).

86. (previously canceled).

87. (new) The composition of claim 82, further comprising IFNβ.

88. (new) A method of augmenting the anti-cancer, immune modulating or anti-viral properties of IFNβ comprising administering to a patient in need thereof a therapeutically effective amount of the composition of claim 82 or 87.

89. (new) The method of claim 88, wherein the method is for augmenting the immune modulatory activities of IFNβ in an autoimmune disease selected from multiple sclerosis, rheumatoid arthritis, myasthenia gravis, diabetes, lupus and ulcerative colitis.

90. (new) The method of claim 88, wherein the method is for augmenting the anti-cancer activities of IFNβ in a disease selected from hairy cell leukemia, Kaposi's sarcoma, multiple myeloma, chronic myelogenous leukemia, non-Hodgkins's lymphoma and melanoma.

91. (new) The method of claim 88, wherein the method is for augmenting the anti-viral properties of IFNβ in a disease selected from chronic granulomatous disease, condyloma acuminatum, juvenile laryngeal papillomatosis, hepatitis A and chronic infection with hepatitis B and C viruses.

92. (new) The composition of claim 87, wherein said polypeptide of claim 62 and said IFNβ are covalently linked.

93. (new) The composition of claim 82, further comprising an IFN antagonist.

94. (new) A method of inhibiting the activity of IFNβ comprising administering to a patient in need thereof a therapeutically effective amount of the composition of claim 93.